In the claims

1.-8. (cancelled)

9. (previously presented) A method comprising:

determining at a first node whether a cache miss relating to a memory unit of a shared memory system of a plurality of nodes including the first node and employing a coherence protocol should be selectively broadcast only to a sub-plurality of nodes lesser in number than the plurality of nodes but greater than one based on a criteria;

in response to determining that the cache miss should be selectively broadcast only to the sub-plurality of nodes, selectively broadcasting the cache miss by the first node only to the sub-plurality of nodes.

10. (previously presented) The method of claim 9, further comprising, in response to determining that the cache miss should not be selectively broadcast to the sub-plurality of nodes, broadcasting the cache miss by the first node to all of the plurality of nodes.

11. (original) The method of claim 9, wherein the criteria includes whether selective broadcasting is likely to reduce total communication traffic among the plurality of nodes and unlikely to increase latency as compared to just broadcasting the cache miss to all of the plurality of nodes to reach an owning node for the memory unit.

12. (previously presented) The method of claim 9, wherein determining whether the cache miss should be selectively broadcast to the sub-plurality of nodes comprises determining whether the first node is a home node for the memory unit, such that selectively broadcasting the cache

miss to the sub-plurality of nodes comprises selectively broadcasting the cache miss to one node of the plurality of nodes as an owning node for the memory unit as stored at a directory of the first node as the home node for the memory unit.

13. (previously presented) The method of claim 9, wherein determining whether the cache miss should be selectively broadcast to the sub-plurality of nodes comprises determining whether the first node has a pre-stored hint as to a potential owning node for the memory unit, such that selectively broadcasting the cache miss to the sub-plurality of nodes comprises selectively broadcasting the cache miss both to a home node of the memory unit and to the potential owning node for the memory unit.

14. (previously presented) The method of claim 9, wherein determining whether the cache miss should be selectively broadcast to the sub-plurality nodes comprises determining whether the memory unit relates to a predetermined memory sharing pattern encompassing the sub-plurality of nodes, such that selectively broadcasting the cache miss to the sub-plurality of nodes comprises selectively broadcasting the cache miss to the sub-plurality of nodes.

15. (previously presented) A method comprising:

determining at a first node whether a cache miss relating to a memory unit of a shared memory system of a plurality of nodes including the first node and employing a coherence protocol should be selectively broadcast only to sub-plurality of nodes lesser in number than the plurality of nodes but greater than one, based on whether selective broadcasting is likely to reduce total communication traffic among the plurality of nodes and unlikely to increase latency as compared to just broadcasting the cache miss to all of the plurality of nodes to reach an owning node for the memory unit; and,

in response to determining that the cache miss should be selectively broadcast only to the sub-plurality of nodes, selectively broadcasting the cache miss by the first node only to the sub-plurality of nodes.

16. (currently amended) A method comprising:

determining at a first node whether a cache miss relating to a memory unit of a shared memory system of a plurality of nodes including the first node should be selectively broadcast only to a sub-plurality of nodes of the plurality of nodes, based on whether the first node is a home node for the memory unit ~~or whether the first node has a pre-stored hint as to a potential owning node for the memory unit~~;

in response to determining that the cache miss should be selectively broadcast only to the sub-plurality of nodes, selectively broadcasting the cache miss by the first node only to the sub-plurality of nodes;

otherwise, determining at the first node whether the memory unit relates to a predetermined memory sharing pattern encompassing a sub-plurality of the plurality of nodes smaller in number than the plurality of nodes; and,

in response to determining that the memory unit relates to the predetermined memory sharing pattern, selectively broadcasting the cache miss by the first node to the sub-plurality of the plurality of nodes.

17.-21. (cancelled)